III.4 Health and Safety

Budgeting (Check one):

The grantee is encouraged to budget health and safety costs as a separate category and, thereby, to exclude such costs from the average perunit cost calculation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. The grantee is reminded that, if health and safety costs are budgeted and reported under the program operations category rather than the health and safety category, the related health and safety costs must be included in the calculation of the average cost per home and cost-justified through the audit.

Separate Health & Safety Budget	<u>X</u>
Contained in Program Operations	

Incidental Repairs (List repairs, if any, that will be removed as health and safety measures and implemented as incidental repairs.):

If the grantee chooses to identify any health and safety measures as incidental repairs, they must be implemented as such under the grantee's weatherization program in all cases – meaning, they can never be applied to the health and safety budget category. In order to be considered incidental repairs, the measure must fit the following definition and be cost justified along with the associated efficiency measure. Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program.

Incidental repairs necessary for installation of weatherization measures are NOT considered H&S, but will be added to the cost of the efficiency measure and included in the calculated saving to investment ratio (SIR). Such repairs include, but are not limited to:

- Minor electrical, light socket, and switch plates repair for fluorescent lighting installation
- Adequate electrical outlets for room A/C. refrigerator installation, and solar thermal system.
- Protective covering for exterior hot water tanks installed by DOE WAP
- Repair of walls or window frames for room A/C installation
- Minor roof repair for solar hot water collector installation
- Sealing and weather-stripping to prevent air leakage from conditioned rooms to unconditioned space

Health and Safety Expenditure Limits (Provide a per-unit average percentage and justification relative to the amount. Low percentages should include a statement of what other funding is being used to support health and safety costs, while larger percentages will require greater justification and relevant historical support.):

The grantee must set health and safety expenditure limits for their subgrantees, providing justification by explaining the basis for setting these limits and providing related historical experience. It is possible that these limits may vary depending upon conditions found in different geographical areas. These limits must be expressed as a percentage of the average cost per dwelling unit. For example, if the average cost per dwelling is \$5000, then an expenditure of \$500 per dwelling would equal 10 percent expenditures for health and safety. 10 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by subgrantees in direct weatherization activities. While required as a percentage of the average unit cost, if budgeted separately, the health and safety costs are not calculated into the per-house limitation.

Per-Unit Average Percent: 10% Recommend 10% or less, to be determined

Typical efficiency measures are base load only. Almost 100% of homes have no central air or heating systems and rely totally on natural ventilation. Therefore, there is no air sealing measures or pressure diagnostics performed. With very limited WAP funding available, grantee would like to limit H&S items to only those absolutely necessary to safely complete work. Work over the past few years has indicated that only a minimal amount of H&S would apply to this housing stock and weatherization measures being provided.

Deferral Policy (Provide a detailed narrative of the grantees overall deferral policy):

Deferral may be necessary if health and safety issues cannot be adequately addressed according to WPN 11-6 guidance. The decision to defer work in a dwelling is difficult but necessary in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. In the judgment of the auditor, any conditions that exist, which may endanger the health and/or safety of the workers or occupants, should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. The grantee should be specific in their approach and provide the process for clients to be notified in writing of the deferral and what corrective actions are necessary for weatherization to continue. The grantee should also provide a process for the client to appeal to a higher level in the organization.

Agency shall utilize the Weatherization Deferral/Referral Notice (Attachment A) to provide written notice to clients in dwellings where problems exist that are outside the scope of Weatherization. Clients will be given 30 days as stated on the Deferral Notice to take corrective action. If the client is able to take corrective action within 30 days, work should resume as soon as possible after the Agency receives notification from the client. If problems identified in the Deferral Notice are not corrected within 30 days, the subgrantee places the job in an inactive file. The client can reapply when and if the problems noted on the Deferral Notice have been corrected.

Deferral conditions may include:

- Building structure or its electrical system is in a state of disrepair and failure is imminent.
- Extensive moisture/mildew is severe and cannot be resolved under the existing health and safety measures.
- Improperly stored chemicals, combustible materials, or other fire hazards that present a danger to the occupants or the workers.
- Major remodeling is in progress, which limits the proper completion of major weatherization measures.
- Occupant has known health problems that prohibit the installation of weatherization materials.
- The client is hostile, uncooperative, abusive, threatening to the auditors, crews or staff that must work or visit the dwelling.
- The extent of the lead-based pain in the dwelling would potentially create further health and safety hazards
- The presence of sewage or animal feces in the home will endanger the workers/crews and client if the weatherization work is performed.
- There is not adequate interior space to install hot water tank and exterior location is exposed to the elements. Cost of constructing an exterior shelter is beyond the scope of the program.
- Other

Procedure for Identifying Occupant Health Concerns:

Procedures must be developed and explained on how information is solicited from clients to reveal known or suspected occupant health concerns as part of the initial application for weatherization, additional screening of occupants again during the audit, and what steps will be taken to ensure that weatherization work will not worsen the health concern.

At the time of application, the client must complete a "Client Health Survey" (Attachment B), identifying potential health issues of the applicant and all occupants of the dwelling. This survey will be inserted into the client file for future reference. The energy auditor will review the survey with the client at the time of the initial on-site assessment and verify that information appears to be accurate. The information collected during this process will be used to aid in determining the best material and course of action for the weatherization process. When an occupant's health is fragile and/or work activities would constitute a health or safety hazard, the occupant(s) at risk will be required to leave the home during work activities. Weatherization funds cannot be used to relocate clients. If the client is unable to leave the home and the intended work may exacerbate an occupant's health condition, the home may need to be deferred.

Documentation Form(s) have been developed (Check Yes or No):

Documentation forms must be developed, include the client's name and address, dates of the audit/assessment and when the client was informed of a potential health and safety issue, a clear description of the problem, a statement indicating if, or when weatherization could continue, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options

Yes			

No X

A "Weatherization Deferral/Referral Notice" will be developed for use in the program. (Attachment A.) This form will include client's name, address, date of audit/assessment, clear description of health and safety issues, when and under what conditions weatherization work could continue, client's signature and date they were informed indicating they were informed of their rights and options. A "Client Health Survey" (Attachment B) will also be developed as part of the application package to identify any existing health concerns which could be affected by weatherization work.

Completing the General Issue Tables below, or something similar, for each health and safety category will help explain to DOE how the WPN 11-6 requirements will be addressed.

Air Conditioning and Heating Systems

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	X
Alterative Guidance	

There will be no heating system replacement, repair, or installation with DOE funds as there are no heating systems in grantee's territory.

Central air conditioning systems will not be addressed as the climate does not warrant the need for central A/C. Room air conditioner replacements/repair or installation must first be attempted through cost justification on the priority list before using H & S funding. If this is not possible, air conditioner installation will be allowed in homes of the at-risk occupants as defined as an occupant who has a documented medical need to have conditioned air.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE WAP funds will be used for the above activity.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the measure is beyond the scope of DOE WAP, the client will be notified by the "Weatherization Deferral/Referral" form.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

WAP crews will test any existing room air conditioner to determine if it is operable. If it is not and the client meets the at-risk criteria, a replacement room A/C unit that meets the criteria of the priority list will be installed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

When serious electrical hazards, gross overloads, or electrical wiring exposure are present, the energy auditor shall notify the owner and defer the propsed installation of weatherization measures in the unit until such hazards are remedied.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

If repair/replacement is beyond the project scope of DOE either for efficiency or health and safety reasons, the client will be notified in writing by the "Weatherization Deferral/Referral" form, and if possible referred to local agencies that could assist, such as our local Community Action Agencies.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Training will not be needed, as room air conditioner repair/replacement will be performed by a Manufacture Representative or Vendor. WAP auditor/inspector would verify that installation is complete and adequately installed with no problems.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Auditor/inspector will provide client education on appropriate operation and maintenance of A/C units. An operations manual and any warranty information will be left with the client.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Replaced units will be disposed of according to the environmental standards in the Clean Air Act 1990, Section 608, as implemented by 40 CFR 82 (7/1/2006). Materials shall be disposed of by an EPA-approved section 608 type I or universal certified contractor/vendor, and so noted in the file. Disposed units will be recycled when possible.

Air Conditioning Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of air conditioning repair, replacement, and installation including justification for allowability that includes climate justification with degree days and how to define at-risk occupants

Room A/C units will be installed as specified in the grantee priority list and installation standards. Room A/C units that cannot be repaired/replaced through the priority list, and are being repaired/replaced for H &S, will be justified by being located in Climate Zone 1 and identifying at-risk occupants as defined by documented medical reasons for needing A/C.

Heating System Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of Heating System repair, replacement, and installation including justification for allowability that includes climate justification with degree days Not applicable. There will be no central heating system replacement, repair, or installation with DOE funds as there are no central heating systems in grantee's territory.

Appliances and Water Heaters

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	2
Alterative Guidance	Ī

Replacement of water heaters for health and safety is allowed on a case by case basis. Replacement of water heaters with solar or hybrid heat pump water heaters will first be attempted through the priority list. Replacement and installation of other not related appliances are not allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE WAP funds may be used for the above activity.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the measure is beyond the scope of DOE WAP, the client will be notified by the "Weatherization Deferral/Referral" form.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Hot water tanks that are leaking water, producing high carbon monoxide or drafting poorly will be assessed for repair or replacement. Combustion safety testing will be performed on all gas-fired water tanks. If repair is not possible, tank can be replaced. All plumbing work is performed by licensed contractors and must comply with local codes. Local agency staff will confirm installation and that unit is working properly.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If serious electrical hazards, gross overloads, or electrical wiring exposure are present, the energy auditor shall notify the owner and document in the client's file. If such condition is present, the client's home shall be deferred to resolve such major problems prior to any weatherization work.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

If repair/replacement is beyond the project scope, agency will make every attempt to refer client to other local agencies who may be able to assist.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Water heater repair/replacement will be performed by a licensed plumber. Agency inspector will be trained to determine if installation is adequate (hooked up, producing hot water, etc.)

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients are provided with operating instructions, operating manual, and warranty from the manufacturer.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal of appliances shall be according to the environmental standards in the Clean Air Act 1990, Section 608, as implemented by 40 CFR 82 (7/1/2006). Disposal shall be by contractor/vendor. Disposed units will be recycled when possible.

Asbestos - in siding, walls, ceilings, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance ____

Any surfaces to be altered in the weatherization process shall be inspected for asbestos prior to alteration. Crews and contractors must work around any asbestos-containing material. Testing or abatement of asbestos is not an allowable H&S expense.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will not be used for asbestos testing or removal.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If asbestos is present in any area which will be disturbed during weatherization, the asbestos must be remediated prior to weatherization work using non-DOE funds.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

All auditors must attend a formal asbestos awareness training to learn to identify asbestos-containing materials and when it may pose a hazard to clients or workers.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Work will be deferred if crews are unable to perform weatherization due to the presence of asbestos.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

If possible, clients will be referred to other possible non-profit community agencies, referral services and private contractors who are licensed and have expertise to perform asbestos removal.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Agency auditors/assessors will be required to take an Asbestos Hazard Emergency Response Act (AHERA) course to be able to identify asbestos.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

If asbestos is identified by crew, client shall be instructed not to disturb any suspected surface and given the EPA pamphlet "Asbestos in the Home, a Homeowners Guide."

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No asbestos removal work will be performed.

Asbestos - in vermiculite

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance _____ The presence of vermiculite in grantee territory is unlikely as we do not look into the attic. Grantee does not perform any insulation, air sealing, or blower door testing. All measures are base load. However, auditor/assessors will be trained to recognize vermiculite and notify client of its presence.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funding will not be used for testing or removal of vermiculite.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If vermiculite is discovered, the client will be notified and instructed not to disturb the material

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

No weatherization work will occur which could possibly disturb vermiculite.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If vermiculite is present in a dwelling and weatherization work would disturb it, the unit would be deferred until the vermiculite is removed.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

If possible, client will be referred to local agencies if vermiculite is present.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Agency auditors/assessors will be required to take an AHERA course to be able to identify asbestos in vermiculite.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be notified of potential hazard and provided with the EPA pamphlet on asbestos in the home.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

There will be no removal or disposal of vermiculite allowed.

Asbestos - on pipes, furnaces, other small covered surfaces

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance

There are no furnaces in grantee territory. There is nothing to assess.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

No DOE funds will be used for this H&S measure.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This measure is not applicable to grantee territory.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Not applicable. This measure will not be done.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Not applicable, nothing to defer.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Not applicable, nothing to refer.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Not applicable. Assessor/auditors will have AHERA training to identify any potential asbestos.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Since there are no furnaces, it is unlikely that there will be asbestos covering on any pipes. However, if it is identified, client will be notified of asbestos hazard.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Grantee will not be removing or disposing of any asbestos.

Biologicals and Unsanitary Conditions - odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances

Concurrence with WPN11-6 X Alterative Guidance ____



Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowable. Addressing bacteria and viruses is not an allowable cost. Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds may be used to remediate conditions that may lead to or promote biological concerns or unsanitary conditions. This would typically be a plumbing leak or water drainage under a home. **Beyond Scope of DOE WAP:** Describe how the issue will be treated if beyond the scope of DOE WAP.

Client will be asked to correct problem or will be deferred to other agencies who may be able to assist.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Minor plumbing leaks or drainage problems could be remedied with DOE funds.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to local health and social service agencies who can assist in resolving the issues

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Training for sensory recognition of moisture problems is part of the DOE Mold Awareness training. All auditors/assessors will be required to take basic mold/moisture awareness training.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

In homes where mold and moisture has been identified as a problem, clients will be given a copy of "A Brief Guide to Mold, Moisture and Your Home" and given an explanation of conditions that cause deferral.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal of all moisture damaged materials must be in accordance with DOE mold guidance.

Building Structure and Roofing

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance _



Building structure and major roofing repairs are not allowable. Minor roof repairs and construction of enclosures to protect and preserve DOE WAP installed hot water tanks will be allowed, but this will be included in the installation cost of the measure and must meet the SIR.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

Building structure and major roofing repairs are not allowable with DOE funds

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the repairs and installation cost cannot meet the SIR for the weatherization measure, the unit will be deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

There is no remedy. Unit will be deferred.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If dwelling requires structural or roofing repairs, weatherization will be deferred until that work is complete.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to local agencies if repair/replacement is beyond the project scope

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Auditor/assessors will be trained to identify if building structure and roofing is not safe

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be notified that structure is unsafe and referred to housing repair agencies if know

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

There will be no removal or disposal of structural or roofing materials.

Code Compliance

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances

Concurrence with WPN11-6 Alterative Guidance ___



Local building code requirements must be followed at all times. This is particularly important when installing solar hot water systems and hybrid hot water heat pump units. Correction of pre-existing code violations in a dwelling is not allowed unless the code corrective action is required due to the

installation of a weatherization measures.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will be used to comply with local codes in the installation of weatherization materials.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Weatherization work should be deferred if the property has been condemned or red tagged for any code violations which cannot be corrected under this guidance.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Work must meet current applicable code requirements. Work will include obtaining permits and inspection from the local building departments when required.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If the cost of meeting code compliance is excessive and beyond the allowable average cost for the efficiency measure according to the SIR, the property should be deferred until alternative sources of funds are identified to correct the problems.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to other programs or agencies if necessary to bring structure up to code.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Grantee and subgrantees will become familiar with code requirements for installation of weatherization materials by meeting with local code officials. Field personnel are strongly encouraged to attend "building/construction code" instructional classes. The intent of training is not to learn all codes for all trades, but to be aware of codes in the areas that weatherization auditors and crews/contractors commonly encounter. Domestic hot water installation is performed by contractors. Training for code compliance is the responsibility of the installation contractor.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be informed of changes to their homes as the result of code compliance. They will also be notified by the deferral/referral form if their home cannot be weatherized due to not meeting code compliance.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

There are no disposal procedures for this element.

Combustion Gases

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6
Alterative Guidance



Combustion safety testing is required when combustion appliances are present. This will include gas water heaters, gas cook stoves, and any other gas appliance located inside the home. Appliances will be tested for carbon monoxide and gas leaks. If air sealing is done due to air conditioning or heating, natural draft appliances will be tested for draft and spillage under worst-case conditions before and after air sealing. This will be done before leaving the home on any day when work has been done that could affect draft (i.e. tightening the home, adding exhaust).

Combustion appliances must vent to the outside. Correction of venting and gas line leaks is allowed when testing indicates a problem. If problems affecting the immediate safety of the occupants are discovered, the client is immediately notified and the appliance disconnected.

Gas ovens will be tested for CO. Cooking burners will be inspected for operability, CO, and flame quality.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category

DOE funds may be used for combustion testing and venting if required. Correction of venting and gas line leaks is allowable. Repair and cleaning of cook stoves is allowable, replacement is not allowable.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If a combustion appliance cannot be repaired or replaced with DOE funds, it is beyond the scope of WAP and the job will be deferred until the situation is corrected.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

If problems are found during combustion gas testing, appliances may be repaired or replaced if allowable under DOE rules. Gas water heaters may be repaired or replaced if repair is not possible. Cook stoves can be cleaned and repaired, but cannot be replaced with DOE funds. Gas dryers can be repaired, but not replaced. (see Appliance and Water Heater section)

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Problems found with combustion appliances cannot be corrected with DOE funds and will be deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Whenever possible, clients will be referred to local agencies if repair/replacement is beyond the project scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Agency staff and/or contractors shall be trained in CAS testing using proper instruments. Results of testing will be documented in the client files.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients with combustion appliances in the home will be provided information and explanation of combustion safety and hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal is required for testing.

Combustion Gas Problem Discovery: Provide a narrative describing the process to be followed when combustion gas testing reveals health and safety concerns.

If a problem exists affecting the immediate safety of the occupant, the client is immediately notified, and if necessary, the appliance is disconnected.

Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	X
Alterative Guidance	_

Correction of minor drainage, gutters or downspouts to direct rain water away from the building is allowable if within the cost limitations. Installation of gutters, down spouts, extensions, flashing, sump pumps, landscape, is not an allowable cost.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category

DOE funds can be used to correct minor drainage problems.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Extensive installation of gutters, downspouts, sump pumps or landscaping is beyond the scope of WAP and not allowable

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Drainage problems beyond the cost limitation will not be corrected with DOE funds.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If drainage problems beyond the scope of WAP will affect the operation of any weatherization measures, the work will be deferred until such problems are corrected.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be notified of serious drainage problems that are creating health and safety issues or detrimental to installation of weatherization measures. The client will be asked to correct such problems prior to weatherization and/or referred to local agencies who may be able to assist.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Agency staff will be trained to visually identify any drainage problems.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be notified of health and safety concerns regarding poor drainage and the effect this may have on any weatherization work

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal of any material removed from the structure will be done in an environmentally acceptable manner.

Electrical, other than Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance



Minor electrical repairs are allowed where health and safety of the occupant is at risk. Upgrades and repairs are allowed when necessary to perform specific weatherization measures. Typical repairs may be installing switch plate or outlet protectors, replace ceramic light bulb fixtures, or other means to eliminate exposed wiring. Repair or replacement of faulty electrical outlets for A/C, water heater, or refrigerators is also allowable. Upgrades and repairs for weatherization measures are allowable such as relocation of electrical outlet to allow a gas dryer to be relocated for proper ventilation or proper connection of an existing water heater.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds will be used for minor electrical repairs associated with weatherization work.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Electrical work beyond minor repairs are beyond the scope of WAP.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing

Visual inspection will be performed. Crews will check for alterations that may create an electrical hazard. Voltage drop and voltage detection testing are allowed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

When serious electrical hazards, gross overloads, or electrical wiring exposure are present, the energy auditor(s) and crews shall notify the owner and document in the client's file. In such condition, the client shall be deferred to resolve such major problems prior to the installation of weatherization services, ensuring electrical base load is within the electrical safety standards. Weatherization measures that effect electric load include air conditioner(s), refrigerator, and hot water tank replacement.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client may be referred to other local agencies if repair/replacement is beyond the project scope

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Crews will be trained in basic electrical safety, how to identify electrical hazards, and local code compliance. Installation contractors are responsible for proper electrical installation of appliances.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be provided with information and explanation of the hazards of overloading circuits, basic electrical safety/risks and over current protection (where applicable)

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards

Any electrical materials removed from homes will be disposed of per EPA guidelines.

Electrical, Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance



Since no attic insulation will be installed in grantee's service territory, there will be no inspection for knob-and-tube wiring.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

No DOE funds will be used. There will be no insulation placed over knob-and-tube wiring.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of the grantee's weatherization program.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

No testing will be done, no attic insulation.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

No work will be done in attics with knob-and-tube wiring.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

If knob-and tube wiring is discovered, client will be referred to other programs as this is beyond the project scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

No training will occur as no work will be performed in this area.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

No client education will be done as no work will be performed in this area.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal procedures are necessary as no work will be performed in this area.

Fire Hazards

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance _____ Current inspection criteria take into account fire hazards. These include combustion appliance venting systems and required clearances. Auditors also identify any flammable material close to combustion appliances and existence of electrical circuit overloads.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used for identification and correction of fire hazards when necessary to perform weatherization work.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Gross fire hazards that are beyond the scope of weatherization will require deferral of the job until hazards are corrected.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Fire hazards will be ameliorated or removed prior to weatherization work.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If the fire hazards are beyond the scope of WAP, the job will be deferred until the hazard has been remedied.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to other agencies/programs if repair/removal is beyond the project scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Auditors/crews will be trained in basic fire hazard safety.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be notified of any potential fire hazards in the home.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Any flammable material will be disposed of according to EPA guidelines.

Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance __



Air pollutants will be identified by auditor/assessors prior to any work on the job. Removal of pollutants is allowed and is required if they pose a risk to workers. Removal of pollutants that are not necessary to perform weatherization work (old paint cans, oil in garages, etc.) is not allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds may be used to remove pollutants that are of danger to weatherization workers.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Removal of pollutants not related to weatherization work is not allowable.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Dangerous air pollutants will be removed prior to any work.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If pollutants cannot be removed, the work will be deferred until the situation is remedied.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to other programs/agencies if pollutants are beyond the project this scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Weatherization auditor/assessors will be trained to recognize common household pollutants including formaldehyde, tobacco smoke, thinners, solvents, cleaners, and any other substances capable of negatively impacting indoor air

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be informed of observed conditions and associated risks. Client will be given written information and explanation on safety and proper disposal of household pollutants.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards

Pollutants will be disposed of following EPA procedures.

Injury Prevention of Occupants and Weatherization Workers – Measures such as repairing stairs and replacing handrails.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance ___



Workers must take all reasonable precaution against performing work on homes that will subject workers or occupants to health and safety risks. Minor repairs and installation may be conducted only when necessary to effectively weatherize the home. Otherwise, these measures are not allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will not be used to make general home repairs

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of the DOE WAP and home repairs will not be made.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Stairs, handrails, and other general repairs will not be made with DOE funds

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If worksite is not safe, weatherization will be deferred until a safe work environment can be created by client.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to other local social service agencies if repair/replacement is beyond the project scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Assessors will be made aware of general hazards which could prevent weatherization.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be informed of dangerous and unsafe condition of the home.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal, as no work will be performed in this area

Lead Based Paint

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance _



Work that disturbs painted surfaces on pre-1978 housing must be in accordance with the EPA's Lead RRP requirements. All testing, job site set-up and cleanup must be supervised by a Certified Renovator and each crew member must be accompanied by a Certified Renovator. (Currently only HCAP and MEO have received certification). Typical work that may disturb lead paint in pre-1978 homes could include window or through wall Room Air Conditioners. Solar or hybrid hot water system installed with through the wall penetrations will also follow LRRP and LSW. It is doubtful that the disturbance of paint will be affected beyond de minimum levels for these measures, but if it will, the job will be deferred.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds will be used for lead paint testing, site set-up, clean-up, and verification on all pre-1978 homes.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If it appears that extensive amounts of lead paint will be disturbed by weatherization creating further health and safety hazards, the client will be notified that the job will be deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Workers will follow EPA's RRP requirements and DOE protocols for lead safe weatherization (LSW)

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral is required when the condition of the lead based paint in the house is potentially a health and safety hazard.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies

Client will be referred to local lead abatement agencies if the condition of lead paint appears dangerous to health.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

All workers must be trained in LSW and Certified Renovators must attend EPA training.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Where lead paint is present, clients must receive and acknowledge with signature, the most current EPA "Renovate Right" pamphlet.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Proper disposal of lead-paint debris must be in accordance with EPA LRRP protocols

Lead Based Paint Compliance: Provide a narrative describing how RRP and LSW implementation will be conducted and how the grantee will verify compliance. The explanation should clearly show an understanding that LSW and RRP are separate requirements and both are required to be met.

All weatherization staff must complete LSW training within 30 days of hire. At least one staff member must have Certified Renovator status. Mike Vogel of MSU provided both trainings to Hawaii and territory staff in July 2010. Any new staff will be required to have the same training. At least one person at each local agency must be a Certified Renovator. The grantee maintains records of staff trained and certifications.

Mold and Moisture

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances

Concurrence with WPN11-6 X

Grantee will not be correcting any mold and moisture problems. If these problems are encountered during assessment, home will be deferred until problems are resolved.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will not be used to eliminate mold and moisture.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

With limited grantee funds, this issue will not be treated.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Weatherization will be deferred if mold or moisture exists in home.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Water damaged homes shall be deferred

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be asked to resolve mold and moisture problems prior to weatherization work. If mold and moisture problems are severe, they may be referred to other local agencies for assistance.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

All workers will receive Mold and Moisture training on how to recognize problems

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients shall receive "Mold Resources: http://www.epa.gov/mold/moldresources.html; "A Brief Guide to Mold, Moisture and Your Home: U.S. Environmental Protection Agency (EPA), Indoor Environments Division (IED). www.epa.gov/

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal, as no work will be done on this item.

Mold Protocols: Provide a narrative describing protocols for addressing mold found in the client's homes. The protocol should include a method of identifying the presence of mold during the initial audit or assessment, notification to the client, and crew training on how to alleviate mold and moisture conditions in homes.

Suspected mold or severe moisture problems will be identified, using sight and smell, during the early stages of an assessment and a determination made of the severity or extent of the problem. If problem is too severe to weatherize home, client will be notified and job deferred until problem is resolved.

Occupant Preexisting or Potential Health Conditions

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	\mathbf{X}
Alterative Guidance	_

During application intake and home assessment, subgrantee will determine if a person's health may be at risk and/or the work activities could constitute a health or safety hazard. The occupant at risk will be required to take appropriate action based on severity of risk. Temporary relocation of at-risk occupants may be allowed on a case by case basis. Failure or the inability to take appropriate actions must result in a deferral.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

No DOE funds will be spent on this item.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of DOE WAP and home will be deferred if weatherization cannot be done with risk of health and safety of occupants.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Occupants at-risk will be asked to leave home during weatherization or home will be deferred.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If at-risk occupants cannot be relocated during weatherization, the home shall be deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client may be referred to other social service agencies for assistance.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Training will be provided on how to assess occupant pre-existing conditions and determining course of action is required.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be provided with information on any known risks to their health conditions

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal, as no work will be done.

Occupational Safety and Health Administration (OSHA) and Crew Safety

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance

All workers must follow OSHA standards and Material Safety Data Sheets (MSDS) and take precautions to ensure the health and safety of themselves and other workers. MSDS must be posted wherever workers may be exposed to hazardous materials.

Comment/question: Since CFLs contained some degree of mercury, should not MSDS's

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds will be used for OSHA training

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

N/A

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

OSHA and MSDS Compliance: Provide a narrative describing procedures for implementation of OSHA and MSDS requirements related to crew and worker safety, how the 10 and 30 hour training requirements will be met, and what the process is for determining if crews are utilizing good safe work practices according to all requirements (EPA, OSHA, etc.).

DOE funds will be used to provide 10-hour OSHA safety training to all on-site assessors/inspectors (Currently only HCAP has a staff that has received certification). The on-site staff performs initial assessment, install CFLs and water flow restrictors, and perform final inspections. Since the grantee program is very small and only base load measures are installed. It is felt that the 30-hour OSHA course would not provide any additional useful information for the type of work being conducted. Installation of solar hot water systems and hybrid heat pump water heater will be done by contractors. Room air conditioners and refrigerators are delivered and installed by vendors. Old units are disposed of by vendors per EPA guidelines.

Pests

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance

Pest removal will not be done under DOE WAP.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds will not be used for pest removal.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the presence of pest interferes with weatherization, job will be deferred until pests are removed.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Infestations of pests may be cause for deferral where it poses a health and safety concern for workers.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client may be referred to other local agencies if pest infestation is severe and client cannot correct problem

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Training will be provided on how to assess presence and degree of infestation, associated risks, and deferral criteria.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be provided with information on observed condition and associated risks and reasons for deferral.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

No disposal, as no work will be done.

Radon

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance _



Since homes will not be sealed due to natural ventilation, there will be no testing for radon. Only base load measures will be installed which should not affect infiltration or concentration of radon in homes.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

No DOE funding will be used for radon testing.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of the grantees weatherization program.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Radon will not be tested

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Radon will not be addressed as no homes will be tightened as a result of weatherization.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to EPA if they have concerns about radon.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

There will be no training for radon testing or amelioration as this will not be address by grantee.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be referred to EPA consumer's guide to radon if they express a concern.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards No disposal, as radon will not be addressed.

Refrigerant

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance _



Refrigerant will be disposed of as per Clean Air Act 1990, section 608, as amended by 40 CFR82, 5/14/93. Refrigerator and room A/C vendors will provide documentation to subgrantee regarding proper disposal of old units. Subgrantee will maintain records in client files. Every attempt will be made to recycle old appliances.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category

H & S funds will not be used to pay for removal and disposal of old refrigerator and room A/C units. This cost will be included with the cost of the energy efficiency measure

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

No new units will be installed and old removed unless a vendor can certify to the above EPA regulations.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Refrigerant will be disposed of per the EPA guidelines mentioned above.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If refrigerant cannot be disposed of per EPA guidelines, refrigerator will not be removed, and a new refrigerator will not be installed.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

We see no instance were referral would be recommended.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Assessors/inspectors will provide assurance that contractors/vendors are following the above regulations. State will monitor local agencies and local agencies will monitor contractors/vendors to assure compliance.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be informed why and how refrigerant must be disposed of safely.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal will be per EPA regulations mentioned above.

Smoke, Carbon Monoxide Detectors, and Fire Extinguishers

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance _



Installation or replacement of smoke/CO detectors is allowed where detectors are not present or are inoperable. Replacement of operable smoke/CO detectors is not allowable. Providing fire extinguishers are not allowable.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety

DOE funds can be used for installation of smoke/CO detectors in homes receiving weatherization measures.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Grantee does not envision this to be beyond the scope of DOE WAP.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Smoke detectors may be installed in all dwellings weatherized where detectors are not present or are inoperable. CO detectors or combination smoke/CO detectors may be installed in homes with combustion appliances.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated

Where available, client can be referred to local agencies such as fire departments for installation of smoke alarms.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Training will be provided to assessors in installation of smoke/CO alarms

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education

Clients will be educated on the operation of smoke/CO detectors installed by weatherization crews.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Inoperable units will be removed when possible and disposed of per EPA guidelines.

Smoke/CO Detector Installation: Provide a narrative describing smoke/CO Detector installation parameters and procedures.

Smoke/CO detectors can be installed per manufacturer's guidelines in all dwellings where detectors are not present or are inoperable. Agency may install as many units as are recommended/required under current local building code. Agencies will include a clause in their initial application packet that releases the Agency and or staff from any liability as a result of weatherization work done to the client's home. Agency will provide instruction for use and maintenance of the installed device(s).

Solid Fuel Heating (Wood Stoves, etc.)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	X
Alterative Guidance	

There are very few wood stoves in grantees territory due to the mild climate. These would only be found at very high elevations. It is not anticipated that any will be found in client homes. However, maintenance, repair, and replacement of primary indoor heating units is allowed where occupant health and safety is a concern. Maintenance and repair of secondary heating units is allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds can be used for this measure, but very few, if any, are expected

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If solid fuel heating units are beyond the scope of WAP, the unit would be deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

A licensed contractor would be hired to inspect the wood stove for safety, proper installation and venting. If the unit is found defective, it will be repaired or replaced with a safe, energy efficient unit.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If the cost of repair/replacement is beyond the scope of WAP, the unit would be deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client may be referred to other local social service agencies for assistance.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

No training will be provided to WAP crews. Only a licensed contractor will be hired to perform this work.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be educated as to the dangers of an improperly burning combustion appliance in the home.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal of any old units will be done by the vendor.

Space Heaters, Stand Alone Electric

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6	X
Alterative Guidance	Т

Because of grantee mild climate very few space heaters are found in client homes. All of these are at higher elevations with cooler climates. Repair, replacement, or installation is not allowed. Removal is recommended.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will not be used for space heaters.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of DOE WAP and will not be addressed

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Crew will check circuitry to ensure adequate power supply for existing space heaters.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

No work will be done on space heaters.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated

Clients may be referred to other agencies if units are unsafe.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Crews will be trained on basic electrical safety.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Agency staff will inform clients of the hazards and collect a signed waiver if client does not permit removal of

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Space heaters will be disposed of per local regulations.

Space Heaters, Unvented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance



Because of grantee's mild climate very few space heater are anticipated to be found. However, these could be found in areas at higher elevation with cooler climates. If they are found, removal is required, except if unit conforms to ANSI Z21.11.2, prior to any weatherization.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and

DOE funds may be used for testing for air-free carbon monoxide (CO) and checking for ANSI labeling

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If unit is determined to not meet the ANSI standard and client refuses removal, weatherization cannot be performed.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Unsafe units will be removed from home. Testing for air-free carbon monoxide is allowed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Weatherization will be deferred if unsafe units are not removed from home.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated

Client may be referred to other agencies for heating assistance.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Crews will be trained to understand the dangers of unvented space heaters and to perform air-free CO testing (or hire a licensed contractor to do so).

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Crew will inform client of dangers of unvented space heaters- CO, moisture, and NO2

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Old units will be disposed of per local regulations.

Space Heaters, Vented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances

Concurrence with WPN11-6 Alterative Guidance ___



It is not anticipated that these heaters will be found in grantees territory due to the mild climate. However, if vented space heaters are discovered, venting will be tested consistent with furnaces. Draft and CO testing will be conducted, and for steady state efficiency, if possible.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds can be used to test vented space heater. Repair and replacement is allowed if the climate warrants as

defined by grantees map of cool alpine climates (Koppen Climate Zone 7 and above, generally above 1600 feet elevation such as Waimea or Volcano on the Big Island).

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Only if the costs go beyond the allowable cost of weatherization would this be beyond the scope

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Repair or replacement of the faulty space heater by a licensed contractor.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Work would be deferred if the cost of repair or replacement was beyond the DOE allowable cost per unit

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Clients may be referred to other agencies if work is beyond the scope of DOE

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Agency crew will be trained to recognize and test vented combustion space heaters

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Clients will be educated as to the dangers of CO from space heaters that are not properly vented

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Disposal of any heaters removed would be according to local codes.

Spray Polyurethane Foam (SPF)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 X Alterative Guidance



No spray polyurethane foam will be used as no air sealing is done to homes in grantees territory due to the mild climate.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and

N/A

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

N/A

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards. N/A

Ventilation

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6 Alterative Guidance



When no air sealing measures are performed on a home, grantee is requesting an exception from whole house ventilation and local exhaust provisions of ASHRAE 62.2, Ventilation and Acceptable Indoor Air Quality in Low-Rise Buildings. Grantee understands that there may be a revision to the standard in process which would provide such an exception to Tropical

Islands in Climate Zone 1.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will be used for comply with ASHRAE 62.2 Ventilation requirements whenever air sealing is performed on a home. However, because few low-income weatherization-eligible homes have central A/C and are open to natural ventilation, it is not anticipated that air sealing will be done at this time.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If a home is assessed that has central A/C or appears to not have adequate natural ventilation, it will be deferred until a proper assessment can be made by a "licensed design professional."

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Standards for remedy are described in ASHRAE 62.2 compliance section below.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If it becomes too expensive or difficult to have home comply with the ventilation requirement, work will be deferred

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to local agencies if repair/replacement is beyond the project scope.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Training will be provided to local agencies on meeting this requirement. Training will take place in next six months and grantee has one year to demonstrate full compliance to this requirement.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Client will be provided with information regarding adequate ventilation and how it can enhance indoor air quality.

Client will be provided with information regarding adequate ventilation and how it can enhance indoor air quality and prevent pollutants and moisture from accumulating in the home.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Any materials used in meeting the ventilation requirement will be disposed of per local code requirements. **ASHRAE 62.2 Compliance:** Provide a narrative describing implementation of ASHRAE 62.2, which will be required during the 2012 program year. Grantees must provide justification if making changes to AHRAE 62.2 specific to their housing stock and local considerations.

In meeting the provisions of ASHRAE 62.2, grantee proposes an exception to Section 4. Whole-Building Ventilation. Grantee feels they have met the criteria for exception as defined by a) residential buildings in grantees territory have no central mechanical cooling systems and are located in Climate Zone 1, and b) authority having jurisdiction has determined that window operation is a locally permissible method of providing ventilation. Homes being weatherized have no "pressure boundary" as defined by ASHRAE 62.2. In essence, there is no separation of indoor and outdoor air as almost all homes in grantee territory have windows and doors open to natural ventilation most of the year. Most Hawaii homes have around a ratio of 14% window area to floor area, far exceeding 62.2, and ensures a free flow-through, virtually eliminating IAQ and mold problems. Due to the constant average temperatures where even the extreme highs and lows are near or above the typical design of 65F, envelope air sealing and insulation is determined to not be cost effective and will not be a part of the program. The only A/C in weatherized homes will be individual room A/C and will be primarily operated at night in bedrooms and the bedroom will likely be openly ventilated during the day. As the relative humidity is typically high, both exhaust and intake ventilation to a room with A/C would only serve to introduce additional moisture into the room. This would make the room uncomfortable, cause higher energy consumption by the A/C, and would likely decrease IAQ as increased condensation may occur on cooled surfaces in the room promoting the growth of mold and mildew.

Regarding Section 5, Local Exhaust, if there are signs of mold in often closed rooms with a high internal moisture source and potential for strong odors, spot ventilation will be installed. This means a low sone bath exhaust fan with a minimum 70 cfm will be installed in bathrooms with existing moisture problems evident to the preweatherization assessor.

In order to meet Section 6 of ASHRAE 62.2, measures will be taken to minimize air movement across envelope components separating dwelling units from attached garages to avoid any possible CO infiltration. Since the homes are not conditioned, there is no point in sealing off unconditioned crawl spaces and attics.

Clothes dryers will be exhausted directly to the outdoors.

Although rare, grantee will assess any combustion and solid-fuel burning appliances as indicated earlier in this document and assure that they are provided with adequate combustion and ventilation air and vented in accordance with manufacturer's instructions.

Grantee proposes to train all weatherization staff on identification of ventilation, IAQ, mold, and moisture issues within the next 6 months and provide ventilation assessment as part of the H&S home assessment procedures. Contractors will be identified who are capable of installing exhaust fans and venting dryers where necessary. Grantee will have procedures and protocols in place by the beginning of the FY13 program year.

Window and Door Replacement, Window Guards

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative Action/Allowability. Include the guidance from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concurrence with WPN11-6

Window and Door replacement are not an allowable weatherization cost.

Alterative Guidance

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds will not be used to replace windows or doors.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

This is beyond the scope of the grantees program.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If home is in total disrepair, weatherization will be deferred until repairs are made

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Client will be referred to other agencies for any window or door repair or replacement

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

N/A – no work will be done

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

N/A

Other (copy and paste as needed)

Health and Safety Issue: Describe the health and safety category below. Methods for addressing additional energy related health and safety issues must be consistent with DOE guidance.

Grantee does not anticipate any further health and safety concerns to be address by the DOE WAP

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. Note: Some health and safety categories, like combustion gases, require testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Training Provision: Discuss how training will be provided for the specific health and safety category. Note: Some health and safety categories, like OSHA, require training.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. Note: Some health and safety categories, like mold and moisture, require client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.